

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: ROCKY POND	Lake Area (ha):	4.25
Town: STARK	Maximum depth (m):	1.2
County: Coos	Mean depth (m):	0.4
River Basin: Connecticut	Volume (m ³):	17000
Latitude: 44°35'25" N	Relative depth:	0.5
Longitude: 71°20'40" W	Shore configuration:	2.19
Elevation (ft): 1110	Areal water load (m/yr):	242.0
Shore length (m): 1600	Flushing rate (yr ⁻¹):	605.0
Watershed area (ha): 1621.2	P retention coeff.:	0.06
% watershed ponded: 4.5	Lake type:	natural

BIOLOGICAL:

		8 March 1994	11 August 1993
DOM. PHYTOPLANKTON (% TOTAL)	#1	NO WINTER PLANKTON	MOUGEOTIA 20%
	#2	SAMPLES COLLECTED	XANTHIDIUM 15%
	#3	(TOO SHALLOW)	
PHYTOPLANKTON ABUNDANCE (cells/mL)			80
CHLOROPHYLL-A (µg/L)			1.42
DOM. ZOOPLANKTON (% TOTAL)	#1		NO ZOOPLANKTON
	#2		OBSERVED
	#3		
ROTIFERS/LITER			<1
MICROCRUSTACEA/LITER			<1
ZOOPLANKTON ABUNDANCE (#/L)			<1
VASCULAR PLANT ABUNDANCE			Very abundant
SECCHI DISK TRANSPARENCY (m)			1.3 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		12.5	9.0
BACTERIA (E. coli, #/100 ml)	#1		
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m³) : None
Anoxic volume (m³) : None

CHEMICAL:

Lake: ROCKY POND

Town: STARK

	8 March 1994		11 August 1993		
DEPTH (m)	0.5		1.0		
pH (units)	6.4		6.8		
A.N.C. (Alkalinity)	4.6		3.9		
NITRATE NITROGEN	0.20		< 0.02		
TOTAL KJELDAHL NITROGEN	< 0.10		0.21		
TOTAL PHOSPHORUS	<0.001		0.014		
CONDUCTIVITY (μ mhos/cm)	32.5		27.5		
APPARENT COLOR (cpu)	12		14		
MAGNESIUM			0.43		
CALCIUM			2.7		
SODIUM			1.4		
POTASSIUM			< 0.40		
CHLORIDE	< 2		< 3		
SULFATE	6		5		
TN : TP			15		
CALCITE SATURATION INDEX			3.5		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1993

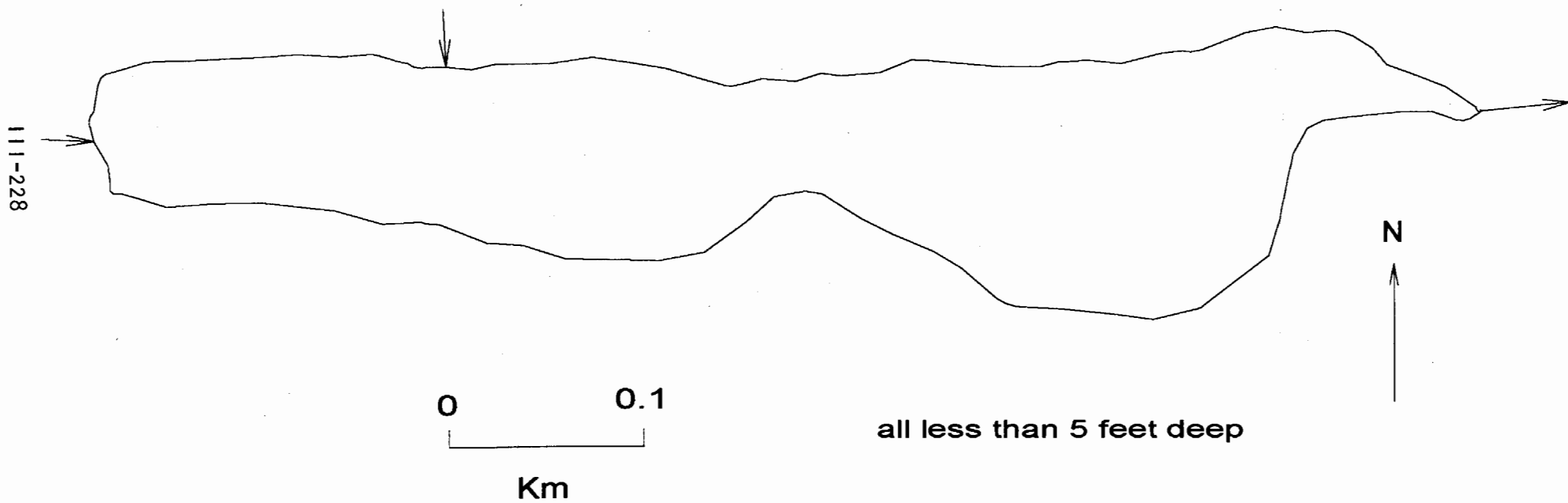
D.O. S.D. PLANT CHL TOTAL CLASS

**	2	6	0	8	Meso.
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COMMENTS:

1. This is a shallow weedy pond located within the White Mountain National Forest. It is accessible by unimproved road, but the road is gated and locked by WMNF.
2. This pond is classified as a wetland for the purposes of the federal Clean Lakes program. It was not listed in the 1964 Water Bodies report.
3. The pond was too shallow and weedy to collect a winter sample. The winter water quality sample was collected near the inlet with running water. No winter plankton samples were collected.
4. The summer net plankton sample was a horizontal tow through the weeds. The phytoplankton observed were sparse and not typical of open-water ponds: they were primarily desmids and filamentous green algae.
5. The wholewater phytoplankton were also sparse; Scenedesmus (15%) and Synedra (15%) were the dominant genera.

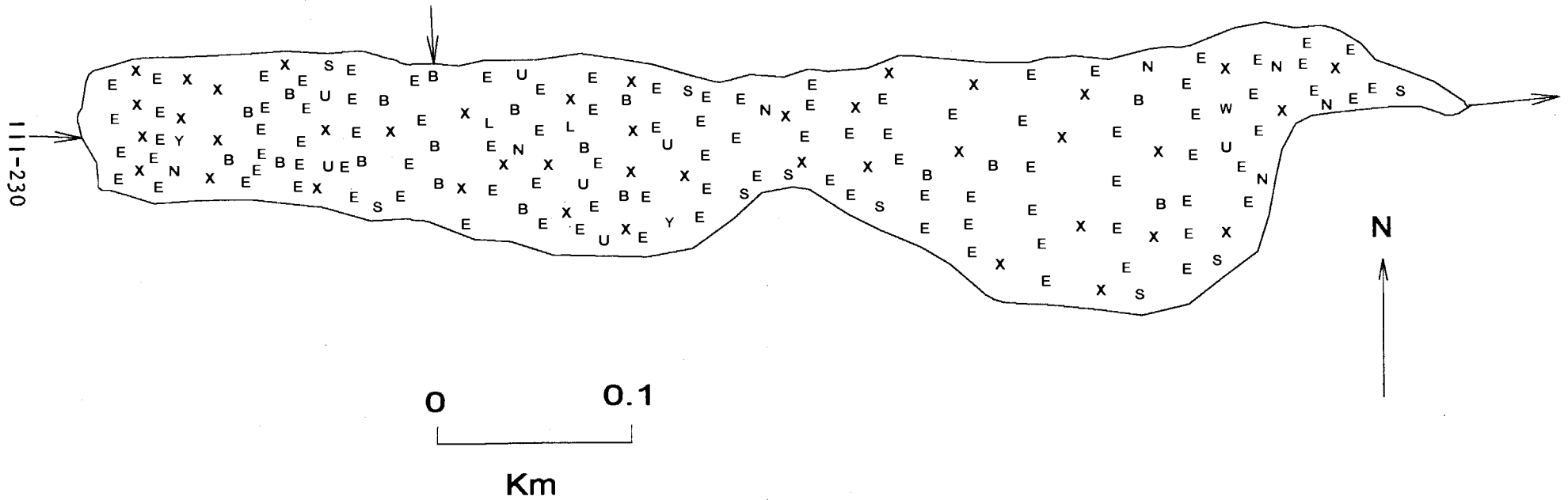
Rocky Pond Stark



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***Dissolved oxygen values are in mg/L**

Rocky Pond Stark



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